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AUTHOR Noffsinger, Edward B.; Pellegrini, Robert J.
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AVAILABLE FROM Robert J. Pellegrini, Department of Psychology, San Jose State University, San Jose, California 95192

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ABSTRACT

Working from a rationale derived from cognitive learning theory, this study was designed to investigate the extent to which the formation and modifiability of first impressions may be affected by the perceiver's tendency to associate the stimulus person with some other individual. Fifty subjects rated their initial attractions toward male and female stimulus persons (models). For each model, subjects were then asked whether there was any individual he or she associated with that model, and if so, the strength of that association. The highly significant results provided strong support for the hypotheses that: (1) a positive correlation exists between evaluations of a stimulus person and another individual with whom he associates that person, (2) the magnitude of this correlation increases with strength of association, and (3) evaluations of a stimulus person are more open to change when there is no associated other. The results are discussed in terms of a number of specific and general psychological concepts and theories. (Author/PC)

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The Déjà Connu Phenomenon:
A Study in the Formation and Modifiability of First Impressions

Edward B. Noffsinger and Robert J. Pellegrini

San Jose State University

Abstract

Problem: The impetus for this research was the familiar experience, upon initial encounter of a particular individual, of feeling that he or she somehow "reminds" one of someone else. Working from a rationale derived from cognitive learning theory, the study was designed to investigate the extent to which the formation and modifiability of first impressions may be affected by the perceiver's tendency to associate the stimulus person with some other individual.

Method: Fifty subjects (25 males, 25 females), tested individually, rated their initial attraction toward each of eight male and eight female stimulus persons (models) photographed displaying expressions classified as "neutral" by at least seven of ten independent judges. The subjects were then asked, for each model, whether there was any particular individual he or she associated with that model, and if so, the strength of that association and the direction of the evaluative response to the associated other.

Four models were selected for the second phase of the study: The models initially most liked and disliked for whom there were moderate to strong associations with a particular person; and two no-association models, liked and disliked to comparable degrees.

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A follow-up photograph of each of these four models which had been judged "likeable" or "dislikeable" by at least seven of ten independent judges was then presented. Each follow-up photograph was from the evaluative category incongruent with the subject's initial attraction response to that model. The subject's final attraction response to each of the four photographed models was then measured, as was the final strength of association with the associated other.

Results and Discussion. The highly significant results provided strong support for the hypotheses that: (a) A positive correlation exists between evaluations of a stimulus person and another individual whom the perceiver associates with that person; (b) The magnitude of this correlation increases with strength of association between the stimulus person and associated other; and (c) Evaluations of a stimulus person are more open to change when there is no associated other, independent of whether the initial evaluation is positive or negative. The results are discussed in terms of a number of specific (e.g., primacy effects, perceptual economy) and general (e.g., consistency theory, associative learning theory) psychological concepts and theories, with an emphasis on the cognitive learning approach within which the rationale for the experiment was developed.

The Déjà Connu Phenomenon:
A Study in the Formation and Modifiability of First Impressions[1]

Edward B. Noffsinger and Robert J. Pellegrini[2]

San Jose State University

The impetus for the study was the familiar experience, upon initial exposure to a person, of feeling that he or she somehow "reminds" one of someone else -- interpersonal events which might be referred to as déjà connu phenomena. Writers concerned with clinical transactions have indeed emphasized unconscious aspects of such affective and/or cognitive associations with a previously-encountered person. Thus, Freud's (1924) well-known discussion of transference, and Sullivan's (1953) concept of parataxic distortion, both deal with the way in which attitudes developed toward significant others (e.g., parents) in one's past may be reactivated in the present situation. The study reported here extends inquiry into the conscious aspects of these phenomena, where the perceiver is able to report whether or not such an association exists, and where the associated person may be any individual from one's past.

Curiously, although there is a considerable literature on stereotyping of categories or classes of people (e.g., Brigham, 1971; Katz & Braly, 1933; Prothero & Melikian, 1955), there has been no systematic research into the effects of interpersonal associations with a previously-encountered individual on evaluative judgments of a very recently-encountered person. Along these lines, the present study was designed to investigate the effects of such associations on the formation and modifiability of first impressions.

Articulation of the motivational dynamics of trait attribution in recent years (e.g., Jones & Davis, 1965; Heider, 1958) has generated considerable theory and research on person perception. One theoretical framework within which the problem of interest here may be developed is the cognitive learning orientation outlined by Stotland and Canon (1972), in which the essential unit of analysis is the schema. As described by Stotland and Canon,

> ...our basic point is that persons generate relatively abstract and generalizable rules, called schemas, regarding certain regularities in the relationships among events. These schemas may be developed on the basis of direct experience, observation of other persons, and direct communication from others (1972, p. 67).

The schema is thus regarded as an abstract organizing principle which gives direction to responses to objects and events.

The assumptions of this cognitive learning perspective which are of particular relevance to the present study are: (1) perceptions are most likely to be influenced by established schemas when the stimulus situation is ambiguous (Stotland & Canon, 1972, p. 188); (2) people are objects about which schemas are very likely to be developed since they are ever-changing entities which are highly important to the individual's own goal attainment (p. 130, p. 188); (3) it is easier to perceive in terms of an established schema than to develop a new one (p. 149); and (4) schemas tend to be "...relatively permanent and impervious to change, ...conservative, i.e., not subject to rapid change in the face of potentially disconfirming evidence (p. 67);"

Thus, from the standpoint of cognitive learning theory, the initial encounter with a stimulus person who somehow reminds one of someone else might be expected to arouse in the perceiver the schema previously-developed to that other person. Correspondingly, the intellectual/affective responses developed

to that other would be elicited by the newly-encountered stimulus person. Consistent with this view, the first hypothesis in the present study was as follows:

Hypothesis 1. A positive correlation was predicted between an individual's initial attraction toward a stimulus person and his attraction toward some other person with whom he associates that stimulus person

Extrapolating from the rationale given above through varying degrees of strength of association between the stimulus person and the associated other, the following hypothesis was formulated:

Hypothesis 2. The magnitude of the correlation described in the first hypothesis was expected to increase with increases in the reported strength of association between the stimulus person and the associated other.

Equally relevant to the aims of the present investigation, however, is the assumed rigidity of an established schema. The essential rationale behind this assumption is that the perceiver tends to be motivated to minimize the equivocality or probabilism of his schemas, especially those about people. In fact, the assumption of conservatism of interpersonal schemas is supported by data indicating the resistance to change of social stereotypes (e.g., Pepitone & Hayden, 1955). Congruent with this analysis, the final hypothesis in the study was as follows:

Hypothesis 3. Attraction judments about a stimulus person were predicted to be more open to change when there is no associated other, independent of whether the intial evaluation is positive or negative.

METHOD

Subjects

The subjects were 25 male and 25 Female Caucasian undergraduates at

San Jose State University. All subjects were participating in partial fulfillment of a course requirement in introductory psychology.

Stimulus Materials

The people used as stimulus persons in the study were sixteen volunteers--all Caucasians recruited from the San Jose community, one male and one female from each of the following age ranges: 19-20; 21-22; 23-24; 25-26; 27-34; 35-40; 41-49; and 60-65. Using a standardized set of conditions, black and white facial photographs were taken of each of these sixteen people individually as they attempted to maintain facial expressions conveying each of three different types of affect: (a) smiling and displaying generally pleasant or positive feelings; (b) angry and displaying generally unpleasant or negative feelings; and (c) neutral. All sixteen stimulus models were photographed five times under each of the three simulated affective expression conditions.

The resulting 240 photographs were first separated into 16 decks, each deck containing all 15 photographs of any given model. These 16 decks were then submitted for preliminary judgments to five male and five female students, also Caucasians from the same large introductory psychology section from which the subject sample was drawn. Each of the 10 judges, tested individually, was given the task of sorting the photographs within decks into the following categories: "likeable," "neutral," and "dislikeable." The order in which the decks were presented was randomized for each judge, as was the order of the photographs within each deck. After having sorted the photographs in any given deck into these three categories, judges were asked to rank order the photographs within categories and the photographs were scored according to their rank (1 = most likeable, neutral, or likeable, etc.).

A criterion of 70% was adopted as the minimal level of interjudge agreement required for inclusion of a photograph in the final stimulus pool. So,

after the judging was completed, photographs grouped into the same category by fewer than 7 of the 10 judges were eliminated. Within categories, only the one photograph of each stimulus person classified identically by the most judges was retained. In the event of a tie, the photograph with the lower cumulative rank across judges was included. The stimulus materials for the study thus consisted of 48 facial photographs separated by attraction categories into three decks, each deck containing the one photograph of each of the 16 stimulus models which was most reliably judged as likeable, dislikeable, or neutral.

Procedure

Subjects were tested individually in 60-minute laboratory sessions with a relaxed, informal atmosphere. Subjects were told that the purpose of the study was to find out more about the way in which people are perceived. The subject was first presented the randomized deck of 16 neutral photographs and asked to indicate his feelings toward each of the 16 models on the following 7-point scale: strongly dislike (-3), moderately dislike (-2), slightly dislike (-1), neutral (0), slightly like (+1), moderately like (+2), and strongly like (+3). The rating form was then removed and the subject was requested to go through the neutral photographs once again, and to indicate for each whether or not there was any particular individual whom he associated with the person in the photograph. If an associated other was so indicated, the subject was then asked: (a) whom the stimulus model reminded him of; (b) his relationship (friend, immediate family, etc.) to the associated other; (c) to show the strength of that association on a 3-point scale (weak = 1, moderate = 2, strong = 3); and (d) to rate his feelings toward that associated other on the 7-point scale given above.

On the basis of each subject's responses to the 16 neutral photographs, the following four of the original 16 models were selected as the target

models to be used in the final phase of the session for that subject: (a) the model the subject initially liked most among those for whom he reported a moderate or strong association between the stimulus model and some other person; (b) the model the subject initially disliked most among those for whom there was such a moderate or strong association; and (c) two of the models for whom there was no such association, which were most closely matched with the foregoing two association models in degree of the subject's initial liking or disliking.

After the target photographs were selected by the experimenter, each subject was then shown (in random order), and asked to rate his attraction (using the 7-point scale) toward a single follow-up photograph of each of the four target models. In all cases, this follow-up photograph was from the evaluative category incongruent with the subject's initial rating of that target model. The criterion of incongruence here was the judges' response in the preliminary stimulus photograph selection process. Thus, for the association and no-association target models which the subject initially liked, the follow-up photograph was the one most reliably classified by the judges as dislikeable. Similarly, for the association and no-association target models which the subject initially disliked, the follow-up photograph was the one most reliably classified by the judges as likeable.

So, in the final phase of the experiment, all subjects were tested once under each of the following four conditions: (a) association target model initially liked by the subject displaying judged dislikeable expression; (b) no-association target model initially liked by the subject displaying judged dislikeable expression; (c) association target model initially disliked by the subject displaying judged likeable expression; and (d) no-association target model initially disliked by the subject displaying judged likeable

expression. After giving his 7-point attraction rating of the follow-up photograph, the subject was again asked whether there was a particular person whom he associated with the stimulus model shown in that photograph. If the subject gave the same association as he did to the neutral photograph of that model, he was asked to rate the final strength of that association. If the subject no longer indicated an associated other for that stimulus model, or if a different associated other was indicated, then the final association strength was regarded as zero.

RESULTS

Preliminary Judgments of Photographs

For every stimulus model, at least one photograph in each of the three simulated affective expression categories met or exceeded the 70% criterion of interjudge agreement as to likeability, dislikeability, and neutrality. Of the 48 photographs used in the experiment, interjudge agreement was 70% for 14 photographs, 80% for 13, 90% for 15, and 100% for 6 of the photographs. Moreover, average interjudge reliabilities for these photographs in the three categories of likeable, dislikeable, and neutral were comparable, with mean per cent agreement being 86%, 84%, and 78%, respectively. In debriefing sessions with the judges it became clear that one factor precluding even higher interjudge reliabilities was the very effect the study was designed to test. Specifically, judges' comments indicated that the effect of associated others was often influencing their classifications of stimulus models. There were no significant differences between male and female judges in their classification of male and female stimulus models. In the five instances in which it was not possible to approximate a matching of the association and no-association target models on attraction ratings, the subjects' data were discarded and additional subjects were run in their place.

First Impressions

At the outset, the question arises as to the frequency with which first impressions are affected by attitudes which the perceiver has developed toward a particular other whom he associates with the stimulus person. The results of the present study suggest that this déjà connu phenomenon may occur quite frequently. Specifically, an associated other was indicated in 375 (47%) of the 800 judgments made by the 50 subjects in evaluating the 16 neutral stimulus models. When such associations were reported, their strength was characterized as weak in 24%, moderate in 41%, and strong in 35% of the cases. Thus, the associations were rated as moderate or strong in 3 out of 4 of the instances in which an association was given--ie., 36% of all judgments of neutral stimulus photographs. In addition, the associated other tended to have a generally positive influence on evaluations, with the model in the neutral stimulus photograph rated in the likeable direction (+1, +2, or +3 on the 7-point attraction scale) 57% of the time when an association was given, as compared with 35% in the dislikeable direction (-1, -2, or -3), and 8% rated as neutral (zero). This distribution departed significantly from chance ($\chi^2 = 11.28$, $df = 2$, $p < .01$).

A system of categories was developed to provide a descriptive analysis of the relative frequency with which particular individuals of varying relationship classes were reported as the associated others. In general, both frequency and strength of association were low at both extremes of social distance (i.e., associations within the subject's immediate family and remote acquaintances), with the number of associations from the immediate family being particularly low. Moreover, strength of association was relatively uniform throughout the wide range of intermediate social distances, and frequency of associations was greatest for the categories of moderate closeness---- e.g., friends, fellow students, etc.

The first hypothesis was confirmed by a significant, positive, overall correlation between initial attraction toward the stimulus model (neutral photograph) and attraction toward the associated other (r = .79, df = 373, p <.001). As shown below, the correlations were also highly significant at all three levels of strength of association.

The second hypothesis was also supported by a clear trend in the direction of higher correlations between attraction ratings of the stimulus person and of the associated other with increase in the reported strength of the association. Specifically, the correlations between these attraction ratings (see Figure 1) were as follows for the three strengths of association: weak, r = .58, df = 87, p <.001; moderate, r = .72, df = 152, p <.001; and strong, r = .90, df = 130, p <.001. Using two-tailed tests (Walker & Lev, 1953), significant differences were established between the correlations for moderate versus strong (z = 4.67, p <.001) and weak versus strong (z = 5.83, p <.001) association strengths. The difference between the correlations for the weak and moderate strengths of association, however, was not significant (z = 1.37, p = .19).

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Insert Figure 1 about here

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Modifiability of Impressions

As predicted in hypothesis 3, the change in evaluation of stimulus models upon presentation of a photograph portraying an expression judged incongruent with the subject's initial attraction response to the model was signifantly greater for no-association than for association models. The results of this aspect of the study, summarized in Table 1, supported the hypothesized contention that the change in attraction response would be greater for no-association

models, independent of whether the initial evaluation was that of liking (t = 2.86, df = 98, $p < .005$) or disliking (t = 3.86, df = 98, $p < .001$). Overall, the average change in attraction response was twice as large for no association ($\bar{X}$ = 2.23) than for association ($\bar{X}$ = 1.12) models, with this difference also highly significant (t = 4.83, df = 198, $p < .001$).

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Insert Table 1 about here

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Further analyses of these data were conducted to compare changes in attraction toward a stimulus person at different levels of reported change in strength of association after presentation of the follow-up photograph providing information incongruous with the subject's initial evaluation. As depicted in Table 1, when there was no change in strength of association (as was the case in 48.5 % of all judgments), changes in attraction responses were significantly smaller for association than for corresponding no-association stimulus persons, independent of whether the initial evaluation was that of liking (- .05 versus - 2.19 units, t = 5.80, df = 40, $p < .001$) or disliking (+ .04 versus + 2.29 units, t = 5.97, df = 56, $p < .001$). Thus, attraction ratings were almost completely rigid for association models for whom no change in association strength occurred upon presentation of information about the stimulus person which was incongruent with the subject's initial evaluation of that person.

However, as is also shown in Table 1, with increasing change in strength of association (-1, -2, or -3 units), changes in attraction toward association models upon presentation of the incongruous information tended to approach the magnitude of changes in attraction for corresponding no-association models, independent of whether the stimulus person was initially liked or disliked.

In general, the mean changes in attraction ratings for both association and no-association models were, for every degree of change in strength of association, independent of initial liking or disliking. For all of these non-zero changes in strength of association, the differences between changes in attraction ratings between association and corresponding no-association stimulus persons were not significant.

After grouping subjects and models by sex, and dividing models into older and younger groups, exploratory 2 x 2 x 2 analyses of variance of these factors were run on all variables measured in the study--i.e., initial attraction toward the stimulus person; initial strength of association; attraction toward the associated other; and changes in both attraction toward the stimulus person and in strength of association upon presentation of the incongruous stimulus photograph. These analyses failed to reveal any significant effects.

DISCUSSION

The results of the study indicate the powerful effects of associated others on both the formation and modifiability of first impressions.

In support of the experimental hypotheses, first impressions were found to be very frequently and strongly influenced by attitudes established toward previously encountered others that the perceiver associates (for whatever reason) with the stimulus person. In brief, these results may be summarized as follows: (a) an associated other was indicated in nearly half of all judgments; (b) positive correlations between attraction toward the stimulus person and associated other were high and significant, and increased significantly with increases in strength of association; and (c) a large proportion of the evaluative response to the associated other appeared to generalize to the stimulus person. Moreover, the types of associations most frequently reported

fell at intermediate social distances from the perceiver (e.g., friends), with suprisingly few associations occurring within the immediate family, where strengths of association were also substantially reduced.

Also as predicted, attraction judgments were significantly more open to change when there was no associated other, regardless of whether the stimulus person was initially liked or disliked. Interesting patterns emerged in analyzing these results by changes in reported strength of association between the stimulus person and associated other following the presentation of incongruous information. Both favorable and unfavorable first impressions remained virtually unchanged in the presence of incongruous information when there was no change in strength of association, with no change occurring in approximately half of the cases. Rigidity of first impressions diminished rapidly with even slight changes in strength of association. That is, when the subject reported being less reminded of the associated other by the follow-up photograph than he was by the initial, neutral photograph of that model, approximately the same flexibility in attraction ratings was evidenced as was the case for stimulus persons for whom there was no associated other. Thus it appears that an individual continues to feel toward a stimulus person very much as he does toward the associated other, and somehow neglects to incorporate subsequent information conflicting with his initial impression, so long as the original strength of the association is maintained. However, once the original strength of association begins to weaken, there is an increased tendency for the perceiver to integrate new information which may be inconsistent with his initial impressions into his evaluative judgments about the stimulus person.

While this study focused on cases where a particular person was indicated as being associated with the neutral stimulus photograph, classes of persons (i.e., stereotypes such as "convict," "alcoholic," etc.) were occasionally reported. In analyzing a few such judgments for modifiability of first impressions, qualitatively similar results were obtained as for those instances where a particular associated person was indicated. When stereotypes were given, subjects sometimes reported becoming suddenly aware that it was not really a stereotype that was associated with the stimulus person, but rather a particular person.

It should be acknowledged that the results of the present study lend themselves to interpretation by a number of specific and general psychological concepts and theories. From one point of view, for example, the aspect of these results which focuses on modifiability of impressions may be construed as reflecting a form of primacy effect (Luchins, 1957) which is maintained in spite of subsequent, contradictory information. Similarly, research indicating a tendency toward simplification in person perception (e.g., Gollin, 1954), taken together with the results reported here, suggest that the effects of associated others on the formation and rigidity of first impressions might be accounted for by a general principle of economy in the perception of people.

Among the general theories which might be invoked here, consistency theory provides one possible framework within which to interpret these data. Heider's (1958) balance theory, representing one such consistency formulation, suggests that the similarity in valence (positive or negative) of attitudes toward entities (e.g., people) will be harmonious with the degree to which they are perceived as belonging together. From the standpoint of learning theory, both the positive correlations between ratings of stimulus persons and associated others, and the rigidity of such evaluations, might be conceptualized

as instances of stimulus generalization, with the similarity in response to the two persons being a function of the perceived similarity between the two individuals.

In line with the perspective adopted at the outset of the project, however, the results of the study are clearly consistent with the principles of cognitive learning theory (Stotland & Canon, 1972). Within this theoretical framework, the data reported here may be viewed as a particular instance of the general, functional significance of the schema. That is, the schema is assumed to facilitate behavior by serving to insulate the individual from "...anxiety resulting from experiencing too much change, from being overwhelmed by too much information" (1972, p. 181). Thus the schema may be seen as one of the mechanisms by which the individual makes sense out of, and imposes some consistency and order onto a complex and ever-changing world of sense impressions. The results of the present study support the view that this general approach provides a useful characterization of the processes by which impressions of personality are formed and changed.

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FOOTNOTES

1. This article is based on a master's thesis project conducted by the first author under the direction of the second author. The authors wish to thank Drs. Joseph Cooper, Earl Jandron, and William Winter for their contributions to this research.

2. Requests for reprints should be sent to Robert J. Pellegrini, Department of Psychology, San Jose State University, San Jose, California, 95192.

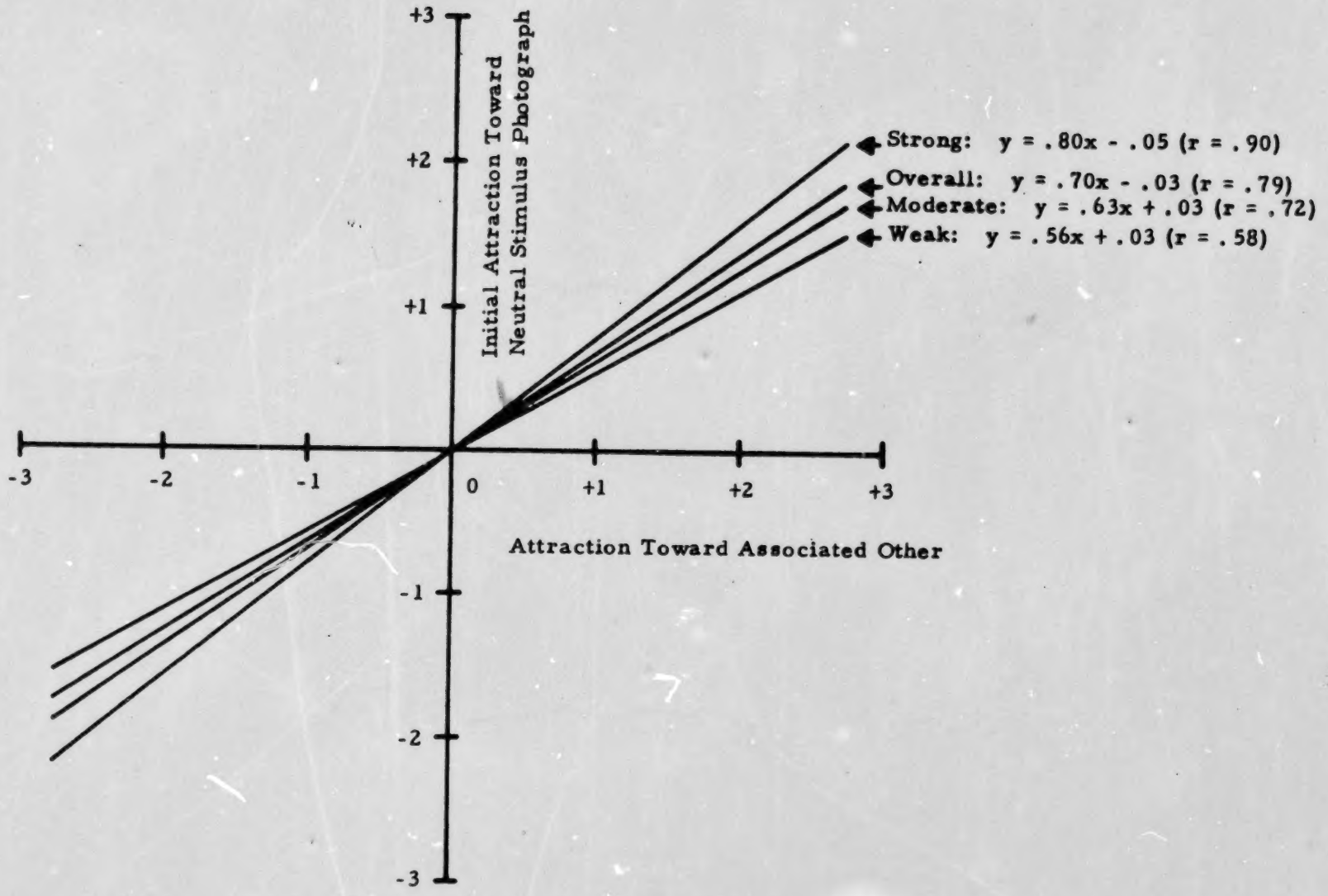

Fig. 1. Summary of correlation coefficients and regression lines for correlations between initial attraction ratings of stimulus persons and associated others for different strengths of association.

Table 1

Mean Changes[1] in Attraction Ratings of Association (A) and No-Association (NA) Models Following Presentation of Incongruous Information

Change in Strength of Association	Percentage of Judgements	Direction of Initial Evaluation		Mean Change	SD	t	df
0	42%	Liking	A	- .05	.99	5.80**	40
			NA	- 2.19	1.37		
	55%	Disliking	A	.04	.89	5.97**	56
			NA	2.28	1.82		
-1	31%	Liking	A	- 1.73	1.12	.43	28
			NA	- 1.93	1.44		
	24%	Disliking	A	1.55	1.07	.85	16
			NA	2.00	1.16		
-2	6%	Liking	A	2.07	1.00	.06	2
			NA	- 2.00	2.00		
	8%	Disliking	A	2.25	.83	.34	6
			NA	2.00	1.23		
-3	21%	Liking	A	- 3.60	1.02	.21	18
			NA	- 3.50	1.12		
	13%	Disliking	A	3.67	.47	1.35	10
			NA	2.50	2.06		
Overall	100%	Liking	A	- 1.30	1.71	2.86*	98
			NA	- 2.26	1.65		
	100%	Disliking	A	.94	1.55	3.86*	98
			NA	2.20	1.70		

[1] Positive values indicate liking, negative values disliking.

*$p < .005$ **$p < .001$